# The Ohio State University College of Arts and Sciences

## **Mathematics Minor (MATH-MN)**

Department of Mathematics, 231 W. 18th Ave, Columbus, OH 43210-1174:

614-292-4975 http://www.math.osu.edu

Mathematical methods are used today in the social, biological, and physical sciences. A minor program in mathematics is a useful supplement to a major program in many different areas. The Mathematics Department has a list of suggested electives to complement various major programs

The minor in mathematics requires at least 15 credit hours of mathematics courses, including 10 credit hours of core topics (Calculus, Foundations, and Linear Algebra). To count toward the minor, each course must have a grade of C- or better. In addition, the CPHR for courses counted toward the minor must be at least 2.0.

Once the Mathematics minor program coordinator (or the coordinator's designee) has approved the Minor Program From, you should file the form with your college or school counselor. For further information about the minor program, contact the Department of Mathematics.

## **Required Courses.** (10 credit hours)

- Multivariable Calculus: 2153, or 2173, or a corresponding accelerated or honors course.
- Foundations of Higher Math: 3345 or 4181H.
- Linear Algebra: 2568 or 5520H.

## **Elective Courses.** (at least 5 credit hours)

Students may select courses from the following list:

- Differential Equations: 2255 or 2415
- Introduction to Mathematical Biology: 3350
- Beginning Scientific Computing: 3607
- Any math course numbered 4000 5999, except for: x193, and 499x.

#### Restrictions.

- Courses used to fulfill requirements for a student's major may not be included in the 15 credit hours counted toward this minor. Such major courses may be used as Required Courses in the minor, but none of those credit hours will count toward the minor.
- A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

## Mathematics minor program guidelines

Required for graduation. No

<u>Credit hours required</u>. A minimum of 15 credit hrs. 1000 level courses shall not be counted in the minor.

## Transfer and EM credit hours allowed.

A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination.

Overlap with the GE. A student is permitted to overlap up to 6 credit hours between the GE and the minor...

## Overlap with the major and additional minor(s)

- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minor(s).

### Grades required

- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of coursework graded Satisfactory/Unsatisfactory may count toward the minor.

<u>Approval required.</u> The minor program must be approved by the academic unit offering the minor.

<u>Filing the minor program form</u>. The minor program form must be filed at least by the time the graduation application is submitted to a college/school counselor.

<u>Changing the minor</u>. Once the minor program is filed in the college office, any changes must be approved by the academic unit offering the minor.

College of Arts and Sciences Curriculum and Assessment Services 154 Denney Hall, 164 Annie & John Glenn Ave. http://artsandsciences.osu.edu

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